

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number  
**WO 2005/084557 A1**

(51) International Patent Classification<sup>7</sup>: **A61B 17/14**

(21) International Application Number:  
**PCT/US2005/006519**

(22) International Filing Date: 2 March 2005 (02.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/549,317 2 March 2004 (02.03.2004) US

(71) Applicant (for all designated States except US): FACET TECHNOLOGIES, LLC [US/US]; 1850 Parkway Place, Suite 900, Marietta, GA 30067 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KOEPPEL, Bradley [US/US]; 102 Vining Parkway SE, Smyrna, GA 30080 (US). CONWAY, William, Elias [US/US]; 1609 Countryside Place, Smyrna, GA 30080 (US). VANHIEL, Brian

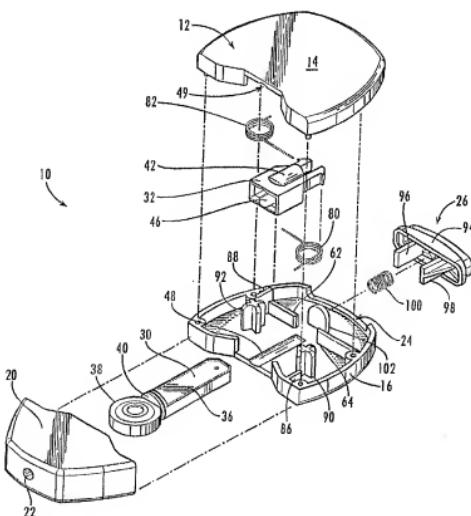
[US/US]; 3993 Plumcrest Circle, Smyrna, GA 30082 (US). GRIFFIS, Jack [US/US]; 1133 Druid Lake, Decatur, GA 30333 (US). BUENGER, David, R. [US/US]; 4171 Edinburg Trail, Roswell, GA 30075 (US).

(74) Agents: KANDCER, Michelle, E. et al.; 100 Parkwood Point, 2018 Powers Ferry Road, Suite 800, Atlanta, GA 30339 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PI, PL, PT, RO, RU, SC, SD, SG, SK, SL, SM, SY, TI, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

*[Continued on next page]*

(54) Title: COMPACT MULTI-USE LANCING DEVICE



(57) Abstract: A multi-use micro-sampling or lancing device (10) having an outer housing (12), a lancelet holder (32) that engages a lancelet (30) and constrains the lancelet along a controlled and predefined path of travel during the lancing stroke, and a drive mechanism with a pair of opposed, off axis torsion springs (80,82) working in tandem to drive and return the lancelet holder through its lancing stroke.



- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GI, GM, KB, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BH, BG, CH, CY, CZ, DE, DK, BE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SI; SI, SK, TR), OAPI (BF, BJ, CI, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*